

ABSTRACT

Methods for analyzing a list of routine identifiers to optimize processing of routines identified in the list. Some embodiments execute a set of routines in multiple passes where each pass comprises each routine in the set processing a single band of its source. The band size of the sources of the set is related to the size of a cache used during execution of the set. A band size of sources of the set is determined so that all data processed by and produced by any routine in the set can be stored to the cache while the routine processes one band of its source. Some embodiments use the list to combine two or more routines into a single routine where the list is modified accordingly. Some embodiments use the list for grouping and re-ordering routines identified in the list to send particular routines to an alternative processor for processing.